

PSIWORLD 2012

Hypnosis in the Treatment of Patients with Anxiety Disorders

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Abstract

Hypnosis plays an important part in the treatment of anxiety disorders. Applying hypnosis allows the patients to reach a lower level of anxiety symptoms. The purpose of the study is to investigate the efficiency of certain therapeutic approaches on the patients who suffer from anxiety disorders. The methods were focused on applying the cognitive-behavioural therapy and applying clinical hypnosis along with the cognitive-behavioural intervention.

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Selection and/or peer-review under responsibility of PSIWORLD 2012

Keywords: Hypnosis, Anxiety Disorders, cognitive-behavioural therapy.

1. Introduction

Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components (Seligman, Walker, & Rosenhan, 2000). Barlow (2002) has shown that anxiety represents diffuse fear, which lacks a precise object, often accompanied by somatic accusers: thoracic pain, tachycardia, sweat, headaches, imperious need to urinate.

Pathological anxiety appears when an individual overestimates the probability that a feared event (catastrophe) will occur, or the severity of the event when it does occur (DSM- IV-TR, APA, 2000). There is a simultaneous underestimate of the coping resources and the likely rescue factors. Among young adults, anxiety is frequently associated with extremely high expectations and establishing goals impossible to reach. Failure is then associated to lower self-esteem, self-retreat and high susceptibility to stressful stimuli which produce both anxiety and depressive reactions (Holdevici, 2010).

The percentage of patients who present to psychotherapy to manage their anxiety is quite high. For other patients a request to learn a technique to help them cope with stress can hide a generalized anxious disorder. Also, anxiety can be a secondary symptom to depression or psychosis (Holdevici, 2010). The anxiety therapy is a complex process that combines cognitive-behavioral therapy with hypnosis, with support therapy and in some

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cases, even with psychiatric medication. Cognitive-behavioral strategies used for the therapy of anxious disorders have the objective of cognitive restructuring (Meichenbaum, 1977). Kossak (1987) describes the fact that through hypnosis forgotten memories of patients are brought back, then restructured by suggestions and the guided imagery exercises. In a study of 1992, Gilbertson and Kemp described the use of hypnosis in the treatment of anxiety disorders, emphasizing the role this therapeutic intervention has in ameliorating the mentioned symptomatology. Other positive results are mentioned by Chaves (2000) who evaluates and describes the way clinical hypnosis has been used to manage anxiety associated with medical conditions and their treatment. Experimental and clinical studies have proven the fact that the efficacy of using hypnosis for treating phobias is based on high suggestibility, vivacity of the visual representations, the ability to focus one's attention, and also on the flexibility of one's cognitive strategies (Crawford and Barabasz, 1993). Also, cognitive therapists used the method of identifying irrational negative thoughts, and replacing them with more realistic, alternative thoughts. The rational thoughts can be administered as hypnotic or post-hypnotic suggestions (Holdevici, 2010).

A meta-analysis was performed on 18 studies during 1995 by Kirsch, Montgomery and Sapirstein, showing that hypnosis, combined with cognitive-behavioural psychotherapy has effects superior to classic cognitive-behavioural psychotherapy (which doesn't include hypnosis). Anxious disorders have been successfully treated by several psychotherapeutic methods which combine hypnosis as a focus of attention method with systematic desensitization, cognitive techniques of identifying and arguing negative thoughts and immersion (direct and brutal confrontation with the anxious situation) (Barabasz, 1977; Hammond, 1990).

The present study sights the description and evaluation of the way cognitive-behavioural techniques and hypnotherapeutic techniques have been used in managing patients with anxiety disorders. The methods were focused on applying the cognitive-behavioural therapy and applying clinical hypnosis along with the cognitive-behavioural intervention.

2. Method, participants and procedure

The study involved 63 subjects aged between 23 and 53, the mean age being 36.89 (SD= 9.44); they were divided into 3 groups: two experimental and one control group by random choice. The first experimental group (Nc**bt** =21) received during the therapeutic protocol cognitive-behavioural treatment. The second experimental group (Nc**bt-h** = 21) benefited from both hypnotherapeutic techniques and cognitive-behavioural interventions. The control group (Nc**g** = 21) did not receive any kind of psychotherapeutic interventions.

Other sample characteristics were: 35 % male and 65% female. Marital status: 27% married, 5.4% divorced and 67.6% never married. Educational status of participants has varied as follows: 42.6% high school graduates and 57.4% university graduates. Employment status: state-owned companies or private sector employees (63.25), college and master-level students, Phd student from several areas (22%), healthcare professionals (14.8%).

Patients appealed to psychotherapy both by own initiative or led by psychiatrist or current doctor who diagnosed them with an anxious disorder. A number of patients (14 subjects) claimed that they presented themselves to treatment because of their family, friends or co-workers who insisted on it. After the introductory sessions (which included the clinical interview, explaining functioning principals of the cognitive-behavioural therapy, explaining the use of hypnosis in the treatment) the patients were informed about forming therapy groups to work on the diagnosed anxious disorders.

The participants were informed about the purpose and the procedure on which the research was based. They were invited to participate in group intervention only after their consent, expressed voluntarily. The patients who gave their consent were explained the structure of the psychotherapeutic intervention. They opted according to their preference to one of the groups (either the one where cognitive-behavioural strategies were applied or the one where both cognitive-behavioural strategies and hypnotherapeutic techniques).

Patients completed the questionnaires on two times, before and after (4 months after) participation in the group therapy.

2.1. Measures

The following instruments have been used: Beck Anxiety Inventory (BAI, Beck et al., 1993), Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) and Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971).

The Beck Anxiety Inventory (BAI, Beck et al., 1993) is a 21-item self-report questionnaire that lists symptoms of anxiety. The respondent is asked to rate how much each symptom has bothered him/her in the past week. The symptoms are rated on a four-point scale, ranging from “not at all” (0) to “severely” (3). The instrument has excellent internal consistency ($\alpha = .92$) and high test–retest reliability ($r = .75$; Beck & Steer, 1990).

The Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971) is a self-report questionnaire which measures mood. The Profile of Mood States is mainly used in the context of clinical psychology, psychotherapy, medicine and sports science. The POMS included sixty five items which load on six different scales: “depression”, “fatigue”, “vigor”, “irritability”, “tension”, and “confusion”. The questions refer to the time period of the “last week including today”. The response scale is divided into five categories ranging from “0=not at all” to “4=very strong”. Internal consistency estimates (Cronbach’s α) range between .63 and .96 for the subscales in POMS. The general score is calculated by summing the scores of the subscales out of which the one for the “vigor” subscale is decreased, and it varies between 0 and 200.

The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) is an administered self-report measure designed specifically for persons with physical illness. The HADS is made up of 14 items, each consisting of a four-point Likert scale ranking from zero to three, with varying response categories, that applies to the previous week. Higher scores indicate greater likelihood of depression or anxiety. Recommended cutoffs are: 8-10: mild cases, 11-15: moderate cases and 16 or above: severe cases (Zigmond & Snaith 1994).

2.2. Intervention

The cognitive behavioural group therapy intervention was formulated based on therapeutic program of Beck (2010) and Holdevici (2010) during 12 therapeutic sessions. The groups were each moderated by two psychotherapists specialized in clinical hypnosis and cognitive-behavioural therapy. For the group in which cognitive-behavioural strategies were applied, each session had a set of structured objectives which were formulated by each client. According to these objectives, the cognitive-behavioural strategies sighted: the way symptoms develop and how the vicious circle is constructed in the case of anxiety disorders; identifying the factors that tend to moderate the level of experienced anxiety by using the vertical arrow technique; imaginary desensitization; desensitization exercises in real plan; identifying the negative thoughts and finding alternative, rational thoughts; the technique of rational thoughts balance; the technique of repetition (which sights the way the patient prepares himself for exposure); modulation; using behavioural experiments; modifying the content of interior ruminations. For the group where cognitive-behavioural strategies and classic and Ericksonian hypnotherapeutic techniques were applied, the objectives formulated by the clients were mentioned in the first phase. During the next phases, the intervention which took place in 12 sessions included: using strategies of becoming conscious of the effects of thought on anxiety; verbal techniques of modifying negative thoughts and dysfunctional beliefs; involving in a relaxation program based on breathing control; modifying the beliefs related to lack of control over negative thoughts with anxious content; mental training with positive content; visualization technique; techniques of guided imagery to mentally repeat situations when the client felt comfortable; suggestions of Ego-Strengthening; using the trance to access and associate internal experiences with anxious content; using the trance for progressive desensitization towards the anxious content; imaginary exercising of coping strategies; modifying mental image; technique of repeating an image; technique of reducing anxious images by using metaphors; combining guided imagery with the ABC model; combining post-hypnotic suggestions with cognitive experiments; combining metaphoric suggestions with mindfulness techniques.

3. Results

The distribution was normal and data were analyzed using parametric statistics. The results are presented in table 1.

Table 1. Means, standard deviations and t- student

GROUP		N	Mean	Std. Deviation	t	p
Control	BAI_PRE	21	40.4286	36.87895	1.552	p=0.13
	BAI_POST	21	26.9048	11.91598		
	POMS_PRE	21	84.0105	22.82064	1.397	p=0.15
	POMS_POST	21	83.2857	22.26464		
	HADS_PRE	21	9.8700	3.51753	1.576	p=0.11
N _{CBT}	HADS_POST	21	9.8095	3.54428		
	BAI_PRE	21	28.7890	11.94457	5.705	p<.001
	BAI_POST	21	19.4452	6.76847		
	POMS_PRE	21	80.3510	22.24430	4.887	p<.001
	POMS_POST	21	62.1381	14.98992		
N _{CBT-H}	HADS_PRE	21	9.8471	4.98867	5.011	p<.001
	HADS_POST	21	5.3605	2.12238		
	BAI_PRE	21	27.3210	11.55365	6.011	p<.001
	BAI_POST	21	20.0300	7.34803		
	POMS_PRE	21	82.0786	23.56052	5.033	p<.001
	POMS_POST	21	63.4438	17.22569		
	HADS_PRE	21	9.5586	4.23417	4.862	p<.001
	HADS_POST	21	4.1157	1.87643		

The pre and post BAI, HADS and POMS scores of 21 clients who received only CBT methods were compared to the pre and post BAI, HADS and POMS scores of 21 patients who received hypnosis and CBT. The scores on these tests were analyzed using paired samples t - tests. Means decreased from pretest - posttest. Hence, for the group (N_{cbt} =21) of patients who received the therapeutic cognitive-behavioural protocol treatment for BAI, the results show a significant difference from pre-post-treatment $t(20)=5,705$, $p<.001$. In other words, the differences between the two means (BAI) are not accidental, confirming that the level of scores for the symptoms of anxiety is higher in the pre-intervention phase. The scores for POMS show also a significant difference from pre-post-treatment $t(20)=4,887$, $p<.001$. Therefore it is confirmed that the level of the general mood score is higher in the experimental group in the pre-intervention phase. Also the scores for HADS show a significant difference from pre-post-treatment $t(20)=5,011$; two-tailed, $p<.001$. It is confirmed that the level of depression and anxiety scores is higher in the experimental group in the pre-intervention phase.

For the (N_{cbt-h} = 21) group which received both hypnotherapeutic techniques and cognitive-behavioural interventions, the results for HADS show a significant difference $t(20)=4,862$, $p<.001$. Therefore it was confirmed that the score level for depression and anxiety is higher in the experimental group in the preintervention phase. No significant differences were registered in the case of the control group regarding the level of anxiety, (BAI) $t(20)=1,55$, $p=.13$, depression and mood symptoms (check post-application values in table 1).

We continued by calculating the effect size to determine the effect of each intervention method in the experimental groups. Therefore medium (Cohen's $d=.74$) and strong ($d > 0.8$) effect size were detected in both groups.

The BAI was completed for 3 groups and the results were studied by the repeated measures analysis of variance (ANOVA). Analysis of variance revealed significant differences in symptoms of anxiety ($F(2,61)=$

9.65, $p < 0.001$, $\eta^2 = 0.06$). Analyzing the results, we noticed an improvement in reducing the level for anxious symptomatology in both experimental groups, mostly in the one where CBT and Hypnosis were applied.

4. Discussion and conclusion

The obtained results reflect the fact that both the intervention based on cognitive-behavioural methods and the one using specific hypnosis strategies and cognitive-behavioural techniques have led to reducing the anxiety, the level of depression and the level of negative mood into the experimental groups. We can assert that these interventions are more effective than no treatment (Cohen's $d > 0.8$ in both experimental groups). It was noticed that in the Ncbt-h group, was found a strong effect size (Cohen's $d: 1.8; d > 0.8$), which brings to our attention that combined CBT and Hypnosis can lead to a strong reduction of the mentioned symptomatology. This decrease of anxiety, depression and level of dysfunctional mood has been statistically significant compared to the results obtained in the control group.

At this stage of treatment development, despite empirically validated treatment protocols for anxiety disorders, the design of an intervention may use several combined techniques. Numerous meta-analyses (Butler, Chapman, Forman, & Beck, 2006; Tolin, 2010) have demonstrated the effectiveness of CBT for anxiety disorders. Less studies presented combined CBT and hypnotherapeutic techniques with mindfulness techniques. Clinical researchers have shown increasing interest in mindfulness and acceptance-based treatments for anxiety disorders (Hayes, Strosahl, & Wilson, 1999). Overall, our findings suggest that the mixt cognitive-behavioural and hypnotherapy model is a highly viable treatment in the case of anxiety disorders.

References

- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders*, (4th ed.), Text Revision (DSM-IV-TR). Washington, DC: American Psychiatric Association.
- Barabasz, A. F. (1977). *New techniques in behavior therapy and hypnosis*, N.Y.: Publisher: Power Publishers.
- Barlow, D. H. (2002). *Anxiety and Its Disorders : The Nature and Treatment of Anxiety and Panic*. New York: The Guilford Press.
- Beck, A. T., & Steer, R. A. (1990, 1993). *Manual for the Beck Anxiety Inventory*. San Antonio: TX: Psychological Corporation.
- Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: A review of meta-analyses. *Clinical Psychology Review*, 26, 17–31.
- Chaves, J. F. (2000). Hypnosis in the management of anxiety associated with medical conditions and their treatment. In D. Mostofsky and D. Barlow (Eds.), *Managing the anxiety associated with medical conditions and their treatment* (pp. 119–147). New York: Allyn & Bacon.
- Crawford, H. J., & Barabasz, A. F. (1993). Phobias and intense fears: Facilitating their treatment with hypnosis. In J.W. Rhue & S. J. Lynn (Eds.), *Handbook of clinical hypnosis* (pp. 311–337). Washington, DC: American Psychological Association.
- Gilbertson, A. D., & Kemp, K. (1992). Uses of Hypnosis in Treating Anxiety States. *Psychological Medicine*, 10, 13–20.
- Hammond, C.D., (Editor), (1990). *Handbook of Hypnotic Suggestions and Metaphors* (1st ed.). W. W. Norton & Company.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guilford Press.
- Holdevici, I. (2010). *Hipnoza clinică*. București: Editura Trei.
- Kirsch, I., Montgomery, G., & Sapirstein, G. (1995). Hypnosis as an adjunct to cognitive-behavioral psychotherapy: a meta-analysis. *Journal of Consulting and Clinical Psychology*, 63(2), 214–20.
- Kossak, H.-C. (1987,Jun). Behavior therapy of generalized fears: Cognitive restructuring under hypnosis, *Experimentelle und Klinische Hypnose*, 3(1), 13–28.
- McNair, D. M., & Droppleman, L. F. (1971). *Manual for the Profile of Mood States*. San Diego, CA: Educational and Industrial Testing Service.
- Meichenbaum, D. (1977). *Cognitive behavioral modification: An integrative approach*. New York: Plenum Press.
- Seligman, M. E. P., Walker, E. F. & Rosenhan, D. L. (2000). *Abnormal psychology*, (4th ed.) New York: W.W. Norton & Company, Inc.
- Tolin, D. F. (2010). Is cognitive behavioral therapy more effective than other therapies?: A metaanalytic review. *Clinical Psychology Review*, 30(6), 710–720.
- Zigmond, A. S. & Snaith, R. P. (1983). The Hospital Anxiety and Depression scale. *Acta Psychiatrica Scandinavica*, 67, 361–370.
- Zigmond, A. S., & Snaith, R. P. (1994). *The HADS: Hospital Anxiety and Depression Scale*. Windsor: NFER Nelson.